SMPS

Main

Woofer

Speaker

T-CON
(below Bracket)

Speaker

HELP : 1-888-751-4086 (Tech Support)
        1-866-894-0637 (FE)

GSPN
http://gspn3.samsungcsportal.com

PLUS ONE
http://my.plus1solutions.net/clientPortals/samsung

HOT TIPS
Power On Problems: (see **page 2**)
Video Problems: (see **page 3.4**)
Other:
HDMI Bleed-over

FIRMWARE
Please check for latest update!
2/21/2011
(T-VALAUSC, 1035.0)
Reason: Support Netflix 2.1 and MLB.tv apps. Support new TV camera (Model: CY-STC1100). Add "3D Optimize" option on Menu for better 3D image.(Only LCD/LED TV)
Previous: 1032.0
Prevents :
-USB Power Overload' message pops up even USB port is not connected
-Plug & Play is displayed upon power up.

SERVICE BULLETINS

Power Board_Circuit Diagram_2010TV available on new GSPN

Please check GSPN for parts update!

Version	Parts No	Short Description
ALL	BN44-00356B	Power PCB
SQ01	BN81-04353A	T-CON PCB
CN02	BN81-04454A	T-CON PCB
SS03	BN81-05079A	T-CON PCB
SQ01	BN94-03370A	Main PCB
CN02	BN94-03370J	Main PCB
SS03	BN94-03370N	Main PCB
ALL	BN96-15397B	Function & IR PCB
CN02	BN07-00852A	Panel
SQ01	BN07-00859A	Panel
SS03	BN07-00913A	Panel
ALL	BN96-13131A	Stand Guide
ALL	BN96-13132A	Stand Base
ALL	BN96-13747H	Front Cover
ALL	BN96-13842A	Rear Cover
ALL	3903-000527	Power Cord
ALL	BN40-00162A	Tuner
ALL	BN96-12723L	LVDS Cable

CN201	SIG.	PIN	SIG.
1	B12V	10	GND
2	A5V	11	GND
3	B12V	12	H_OUT
4	A5V	13	B13V
5	B5V	14	PWM Dimming
6	B5V	15	B13V
7	B5V	16	B5V
8	GND	17	B13V
9	GND	18	IP_DET
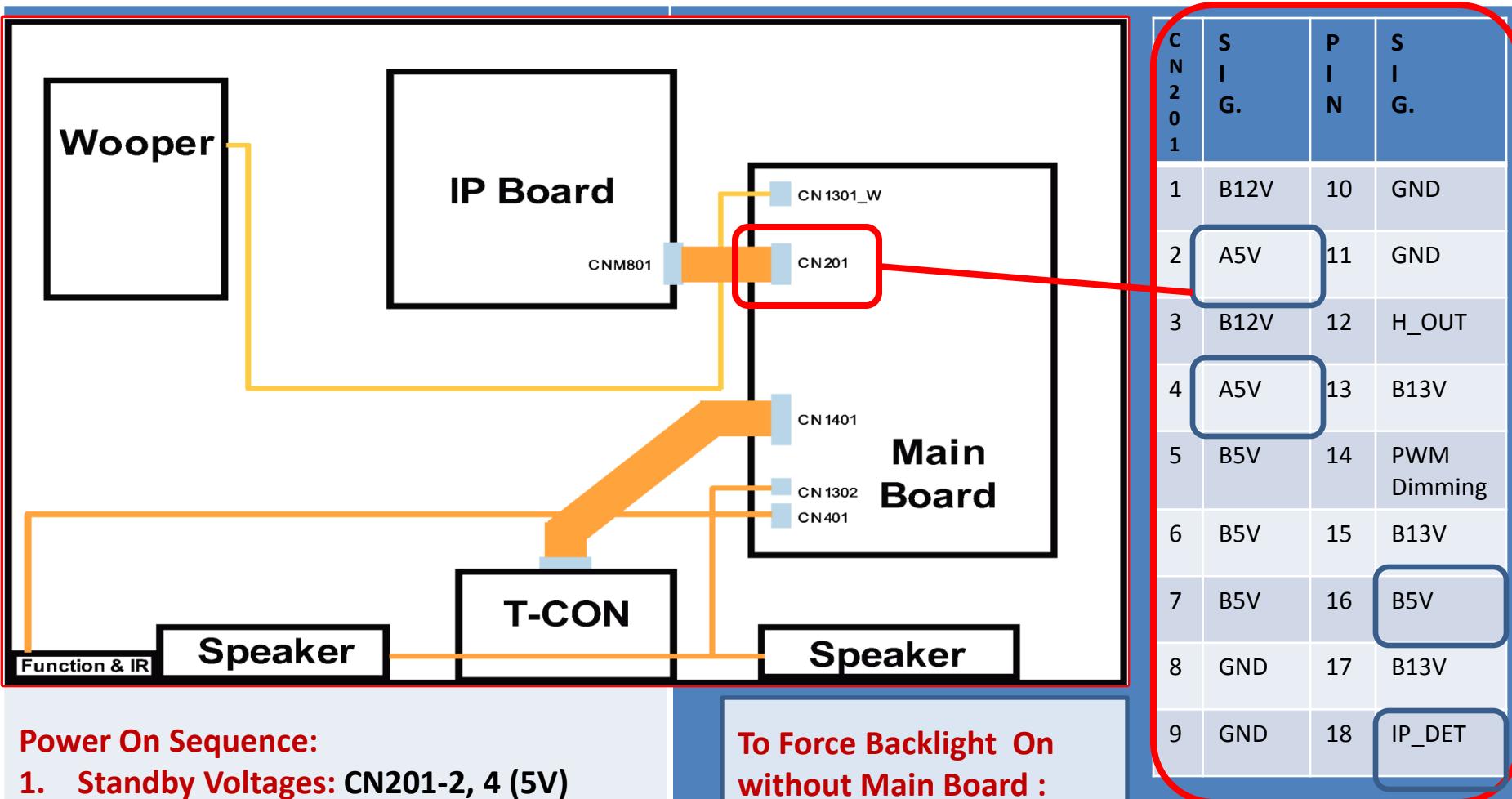
Power On Sequence:

1. **Standby Voltages: CN201-2, 4 (5V)**
2. **Power On probable error on CN201-2 or 4 PS_ON)**
3. **Low Voltage Supplies On CN201-5,6,7,13,17**
4. **Back Light Supply On CN201 -16**
5. **Back Light Confirmation CN201-18**

To Force Backlight On without Main Board :

1. Remove Power Cord
2. Disconnect CN201
3. Plug In Power Cord
4. Backlight should be on immediately.

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

  a. **Customer Picture Test** (models available)
  b. **"Display"** (If display is OK source is suspected)
  C. Substitute with known good Source
     (**external DVD or Signal Generator**)

2. Using Test Patterns in Service Mode

- ENTER SERVICE MODE –

1. Select an active source signal. (HDMI preferred)
   Test Pattern may rely on signal source to appear.

Customer Remote		Service Remote	
2.	Power off	**2.**	Power On
3.	Mute, 182, Power	**3.**	Info, Factory

2010 Models

LCD Signal Path for Troubleshooting

FBE

Main PCB

SVP-PX → FBE2

T-CON / FRC Board
T-CON / T-CON
FRC-Q BGA 375p / FRC-Q BGA 375p

FRC

Display

Customer Picture Test

1. Check OSD & Customer Picture Test.
2. Access SVC Mode (with source signal)
3. Activate **FBE** Test Patterns & Verify.
4. Activate **FRC** Test Patterns & Verify.
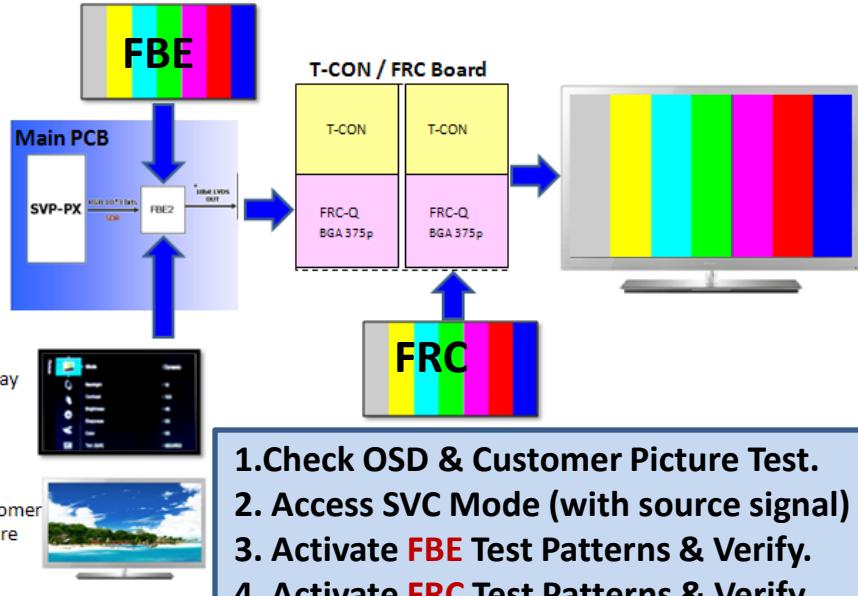
2011 LED 8000 Series

Verify Test Mode Signals

MAIN BOARD
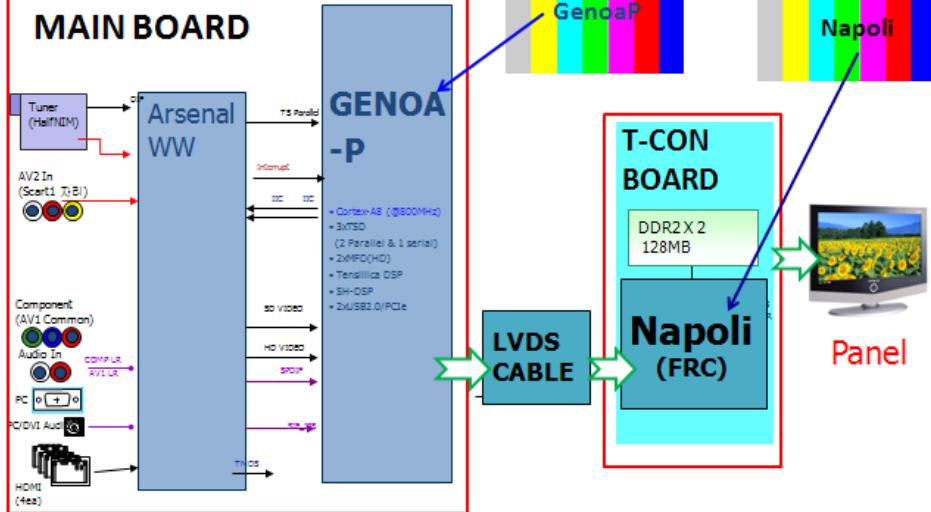
Tuner (HalfNIM)
Arsenal WW
GENOA-P
GenoaP
Napoli

AV2 In (Scart1 TxBl)

- Cortex-A8 (@800MHz)
- 3xTSD (2 Parallel & 1 serial)
- 2xMFD(HD)
- Tensilica DSP
- SH-DSP
- 2xUSB2.0/PCIe

Component (AV1 Common)
Audio In AV1 LR
COMP LR
PC
PC/DVI Aud
HDMI (4ea)

T-CON BOARD
DDR2 X 2 128MB

LVDS CABLE
Napoli (FRC)
Panel

1. Select an active source signal. (HDMI preferred)
   Test Pattern may rely on signal source to appear.
2. Access Service Mode
3. Access **SVC**
4. Access **Test Patterns**
5. Access **Genoa-P**
6. Check Test Patterns
7. If OK suspect input Source
8. Access **Napoli**
9. Check Test Patterns
10. If OK and Genoa-P was not good
    Suspect Main Board or LVDS Cable

3

ON SCREEN FAILURE EXAMPLES:

ALIGNMENTS:

1. **Check/Set Option Bytes:**

Using the Customer Remote
1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order; POWER OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

Project	PB5G	PB5G	PB5G
Model	B550	B550	B550
Model Code	PN50B550T2FXZA	PN58B550T2FXZA	PN63B550T2FXZA
No.	ITEMS		
1	Factory Reset	-	-	-
2	Type	50FSpL4	59FNfK1	63FMeK1
3	Model	PB550	PB550	PB550
4	TUNER	ALPS	ALPS	ALPS
5	Region	US	US	US
6	DDR	SAMSUNG	SAMSUNG	SAMSUNG
7	Light Effect	Off	Off	Off
8	Inch	50"	58"	63"
9	Exhibition Mode	Off	Off	Off

Option Bytes

Factory Reset

Type	50HSnB4
Model	PB550
TUNER	ALPS
Region	US
DDR	SAMSUNG
Light Effect	Off
Inch	50"
Exhibition Mode	Off

If Picture & Display errors Defective Main Board, LVDS, or T-CON

Green lines or a green screen defective main board , LVDS , or T-CON.

Original Image   **Image on Screen**

Pixelization can be caused by the main board but is more commonly a source error

2. Check/Perform Firmware Upgrade for all repairs.

3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

SPECIAL NOTES:

Inform customer of reset of all Settings if Main Board or Panel is replaced.
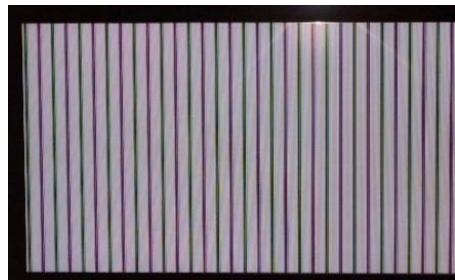
Vertical or Horizontal Lines :Defective Panel likely but also T-CON, LVDS, or Main Board. Use Test Patterns in Factory Service Mode to determine error)

Option												
Type	Model	Tuner	Region	DDR	Light Effect	Audio AMP	Ch Table	Country	Front Color	Local Set	Exhibition Mode
40A1UF0E	UC6500	SEMCO	-	-	OFF	-	-	USA	W-Violet	-	-
40D1UF0E	UC6500	SEMCO	-	-	OFF	-	-	USA	W-Violet	-	-
40A1UF1E	UC6500	SEMCO		-	OFF	-		USA	W-Violet		
40A1UF1E	UC6500	SEMCO		-	OFF	-		USA	W-Violet		
40A1UF1E	UC6500	SEMCO		-	OFF	-		USA	W-Violet		